Part #30178

BRAKE BLEEDER/ VACUUM TOOL

INSTRUCTIONS



The **EASTWOOD 16 PIECE BRAKE BLEEDER/VACUUM TOOL** set includes multiple adapter fittings and hoses to allow use on virtually any car, SUV or light truck brake caliper or cylinder. Constructed with a high-quality composite body and machined brass cylinder for long life and brake fluid resistance. The bourdon tube type vacuum gauge will read up to 30 in Hg [760 mm Hg] of vacuum for performing accurate vacuum diagnostics on many vehicles.

CONTENTS

- (1) Brake Bleeder/Vacuum Tool.
- (1) Reservoir Jar.
- (1) Reservoir Lid (For Bleeding).
- (1) Reservoir Lid (For Storage).
- (2) 23" x 1/4" I.D. [584mm x 6.4mm] clear Vinyl Hoses.
- (2) 3" x 1/4" I.D. [76mm x 6.4mm] clear Vinyl Hoses.
- (1) Barbed 3 way, "Tee" Hose Connecter.
- (1) Barbed Hose Connecter.
- (2) Tapered Bleeder Adapters.



SAFETY INFORMATION

A WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

A CAUTION

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



A READ INSTRUCTIONS

Thoroughly read and understand this manual before using. Save for future reference.



A WARNING IMPROPER MOTOR VEHICLE BRAKE WORK CAN RESULT IN INJURY OR DEATH!

- Performing brake work without adequate training on motor vehicle brake systems can cause injury, death and vehicle accidents. DO NOT attempt to use this tool or begin motor vehicle brake work without proper training and a thorough understanding of motor vehicle braking systems.
- Always consult an authorized service manual on the particular vehicle for the proper brake bleeding procedure before using this tool.



A WARNING

FAILURE TO PROPERLY JACK & SUPPORT A VEHICLE CAN RESULT IN INJURY OR DEATH!

- The Eastwood Brake Bleeder/Vacuum Tool must be used only on properly jacked and supported vehicles by properly trained individuals with thorough knowledge of automotive braking systems.
- Failure to use on a properly supported vehicle can result in serious bodily injury and property damage.
- Always consult an authorized service manual on the particular vehicle for the proper jacking/supporting procedure before using tool.



A CAUTION

EXPOSURE TO AUTOMOTIVE BRAKE FLUID CAN BE A HEALTH HAZARD!

- Be sure to follow all precautions listed on the brake fluid container before using.
- Wear NIOSH approved eye protection while handling brake fluid and during the bleeding procedure.
- Wear appropriate automotive brake fluid resistant gloves while handling brake fluid and during the bleeding procedure.



A CAUTION

EXPOSURE TO AUTOMOTIVE BRAKE DUST CAN BE A HEALTH HAZARD!

- Wear a NIOSH approved respiration protection device while handling brake components and during the bleeding procedure.
- Wear NIOSH approved eye protection while handling brake components and during the bleeding procedure.
- Wear appropriate automotive brake fluid resistant gloves while handling brake components and during the bleeding procedure.

TOOL ASSEMBLY FOR BRAKE BLEEDING



- 1. Twist to release the Reservoir Jar from Reservoir Lid and slip one of the 3" x 1/4" I.D. [76mm x 6.4mm] clear Vinyl Hoses over the molded plastic nipple on the underside of the Reservoir Lid then reattach the Reservoir Lid and turn to lock in place.
- 2. Slip a 3" x 1/4" I.D. [76mm x 6.4mm] clear Vinyl Hose over the brass fitting at the end of the Brake Bleeding/Vacuum Tool.
- 3. Push the opposite end of the 3" x 1/4" I.D. [76mm x 6.4mm] clear Vinyl Hose over one of the molded plastic nipples on the top of the Reservoir Lid.
- **4.** Attach an end of the 23" x 1/4" I.D. [584mm x 6.4mm] clear Vinyl Hose over the opposite molded plastic nipple on the Reservoir Lid.
- 5. Choose the appropriate sized Bleeder Adapter or Tapered Adapter that best fits over the O.D. or inside I.D. of the particular bleeder fitting in use. Slip the open end of the 23" x 1/4" I.D. [584mm x 6.4mm] clear Vinyl Hose over the chosen fitting. NOTE: The 2nd 23" x 1/4" I.D. [584mm x 6.4mm] clear Vinyl Hose may be connected to the 1st if additional length in required by using the supplied Barbed Hose Connecter.

TOOL ASSEMBLY FOR GENERATING VACUUM

- 1. Slip the 23"x 1/4" I.D. [584mm x 6.4mm] clear Vinyl Hose over the brass fitting at the end of the Brake Bleeding/Vacuum Tool.
- 2. Push the opposite end of the 23" x 1/4" I.D. [584mm x 6.4mm] clear Vinyl Hose over the appropriate Tapered Fitting for insertion into a vacuum port or directly onto a suitably sized vacuum port. NOTE: The 2nd 23" x 1/4" I.D. [584mm x 6.4mm] clear Vinyl Hose may be connected to the 1st if additional length in required by using the supplied Barbed Hose Connecter. Additionally, a split vacuum source can be created by using the included "Tee" Fitting.

TOOL USE FOR BRAKE BLEEDING

- Generally, the brake farthest from the master cylinder is bled first (usually right rear) and successively closer wheels are done however it is extremely important to consult a service manual on the particular vehicle being worked on before beginning any work.
 - **NOTE:** Automotive brake fluid can quickly damage paint if spilled. Use extreme care.
- With the vehicle properly jacked and supported, thoroughly clean the brake bleeder fitting to prevent foreign material from entering.
- Following the vehicle manufacturers instructions, open and fill the master cylinder with fresh brake fluid.
- Slip the clear Vinyl Hose with the tightest appropriately fitting Bleeder Adapter over or inside the vehicle's bleeder fitting.

VERY IMPORTANT STEPS:

- Be sure the Vacuum Release Valve (black knob on underside of brass pump body) is securely closed.
- Begin pumping action to create maximum vacuum as displayed on the gauge.
- Once vacuum is accumulated, loosen the vehicle bleeder fitting slightly to open it and allow the vacuum to draw out fluid and air from the brake system.
- Carefully observe the fluid being drawn though the clear tubing for air pockets. When the
 moving fluid becomes solid with no air pockets visible, the vehicle Bleeder Valve may be
 closed.
- Depending on the amount of air present and size of the caliper or wheel cylinder, the above steps may need to be repeated one or more times until a solid column of fluid is present in the tubing. If repeating is required, be sure to:
 - Fill Master Cylinder.
 - Be sure the vehicle bleeder is closed.
 - Pump up vacuum.
 - Open Bleeder to withdraw brake fluid.
 - Close Bleeder.
- Fill the master cylinder with fresh brake fluid and following the vehicle manufacturer's instructions for the proper sequence, progress to each successive wheel until all air is removed from the system.

TOOL USE FOR VACUUM DIAGNOSTICS

- Slip the clear Vinyl Hose with the tightest appropriately fitting Bleeder Adapter over the O.D. or inside the I.D. of an appropriate vacuum port.
- Be sure the Vacuum Release Valve (black knob on underside of brass pump body) is securely closed.
- Begin pumping action to create required vacuum as displayed on the gauge.
- Check for proper vacuum component operation per vehicle manufacturers instructions.
- Vacuum may be released by rotating the Vacuum Release Valve (black knob on underside
 of brass pump body) to the open position.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Gauge Swings Left and Quickly Goes to Zero After Pumping	Vacuum Release Valve not closed	Be sure Vacuum Release Valve (black knob on underside of brass pump body) is securely closed.
	Vehicle brake bleeder valve is open	Brake bleeder valve MUST BE CLOSED to allow vacuum to build before opening bleeder valve.
Tool Will Only Draw a Small Amount of Fluid	Vacuum Release Valve not closed	Be sure Vacuum Release Valve (black knob on underside of brass pump body) is securely closed.
	Vehicle bleeder fitting not open enough	The vehicle bleeder fitting needs to open slightly more to allow the accumulated vacuum to draw out fluid and air from the brake system.
	Dirt or debris may be blocking bleeder outlet	Remove bleeder completely to clean out.
	Brake bleeder may be open too much, allowing air to be drawn in around threads	Partially close bleeder valve. Remover bleeder valve and add a minimal amount of Teflon tape to threads.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Air Bubbles Will Not Stop Appearing in Fluid Column	Vacuum Release Valve not closed	Be sure Vacuum Release Valve (black knob on underside of brass pump body) is securely closed.
	Brake bleeder may be open too much, allowing air to be drawn in around threads	Partially close bleeder valve. Remover bleeder valve and add a minimal amount of Teflon tape to threads.
	Bleeder Threads May Have Loose Tolerances	Remover bleeder valve and add a minimal amount of Teflon tape to threads.
	Brake Fluid Low	Check master cylinder for fluid and fill if empty.

If you have any questions about the use of this product, please contact

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